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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/840,015

05/05/2004

Adrian J. Drexler

MIC-44

9647

1473

7590

11/08/2005

EXAMINER

LAM, TUAN THIEU

FISH & NEAVE IP GROUP

ROPES & GRAY LLP

1251 AVENUE OF THE AMERICAS FL C3

NEW YORK, NY 10020-1105

ART UNIT

PAPER NUMBER

2816

DATE MAILED: 11/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/840,015

Applicant(s)

DREXLER ET AL.

Examiner

Tuan T. Lam

Art Unit

2816

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) 4, 7, 11, 14-23 and 28-35 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 6, 8-10, 12, 13, 24, 26 and 27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 9/28/05, 6/6/05.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

This is a response to the election of species filed 9/28/2005. Applicant has elected claims 1-3, 5-6, 8-9 and 24-27 for further examination. Examiner would like to clarify that claim 25 has similar features as to claim 4, 7, 18-32 and 33. Also, Examiner has noted that claims 10-13 were inadvertently left out on the requirement for election. Claims 10 and 12-13 are drawn to the same embodiment of the elected claims 1-3, 5-6, 24, 26 and 27. **Therefore, claims 1-3, 5-6, 8-9, 10, 12-13, 24, 26 and 27 are being examined.** Claims 11 and 25 are drawn to the same embodiment of the non-elected claims of species B. Therefore, claims 4, 7, 25, 11, 28-33; 14-21; 22 and 34; 23 and 35 have been withdrawn from consideration.

#### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-3, 5-6 and 8-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, the recitation of "a clock signal" in line 12 is indefinite because it is unclear as to if this clock signal is the same as or is different from the clock signal recited in line 5. The recitation of "generating a clock signal in response to said delayed fed back signal independent of said reference signal" in lines 12-14 is indefinite because it is misdescriptive of the present invention. Figure 2 shows a first embodiment of the invention in which the output clock signal (DLLCLK) is synchronous with the reference signal RCLK. Therefore, the output clock signal (DLLCLK) is dependent upon the reference signal. Correction is required.

In claim 2, the recitation of “the synchronized clock signal” is indefinite because it is unclear as to if this synchronized clock signal is the clock signal recited in claim 1, line 5 or the clock signal recited in claim 1, line 12. Clarification and correction are required.

In claim 5, the recitation of “the synchronized clock signal” is indefinite because it is unclear as to if this synchronized clock signal is the clock signal recited in claim 1, line 5 or the clock signal recited in claim 1, line 12. Clarification and correction are required.

Claims 3, 6 and 8-9 are indefinite because of the technical deficiencies of claim 1.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-3, 10 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Harlos et al. (USP 4,805,021).

Figure 2 shows a method of generating a clock signal ( $\Phi$ ) based on a periodic reference signal (24), said method comprising receiving a periodic reference signal, generating a clock signal synchronized to said reference signal in response to said receiving, feeding back said synchronized clock signal, delaying (27) said feed back synchronized clock signal to maintain synchronization with said reference signal, and generating a clock signal in response to said delayed fed back signal independent of said reference signal (when the switch 23 coupled to node 25) as called for in claims 1-2, 10 and 24.

Regarding claim 3, figure 2 shows the multiplexer 23.

Art Unit: 2816

5. Claims 1-3, 10 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Iwamoto et al. (USP 6,292,040).

Figure 13 shows a method of generating a clock signal (INTCLK1) based on a periodic reference signal (EXTCLK), said method comprising receiving a periodic reference signal, generating a clock signal synchronized to said reference signal in response to said receiving, feeding back said synchronized clock signal, delaying (200) said feed back synchronized clock signal to maintain synchronization with said reference signal, and generating a clock signal in response to said delayed fed back signal independent of said reference signal (when the selector 20 coupled to the fed back signal) as called for in claims 1-2, 10 and 24.

Regarding claim 3, figure 2 shows the multiplexer 20.

6. Claims 1-3, 10 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Li et al. (USP 6,208,183).

Figure 3 shows a method of generating a clock signal (CLK out) based on a periodic reference signal (CLK ref), said method comprising receiving a periodic reference signal, generating a clock signal synchronized to said reference signal in response to said receiving, feeding back said synchronized clock signal, delaying said feed back synchronized clock signal to maintain synchronization with said reference signal, and generating a clock signal in response to said delayed fed back signal independent of said reference signal (when the selector 216 coupled to the fed back signal) as called for in claims 1-2, 10 and 24.

Regarding claim 3, figure 2 shows the multiplexer 216.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an

Art Unit: 2816

international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-3, 5-6, 8-9, 10, 12, 13, 24 and 26-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Lin (USP 2003/0081473).

Figure 4 shows a method of generating a clock signal (ICLK) based on a periodic reference signal (XCLK), said method comprising receiving a periodic reference signal, generating a clock signal synchronized to said reference signal in response to said receiving, feeding back said synchronized clock signal, delaying (150) said feed back synchronized clock signal to maintain synchronization with said reference signal, and generating a clock signal in response to said delayed fed back signal independent of said reference signal (when the multiplexer 124 coupled to signal 118) as called for in claims 1-2, 10 and 24.

Regarding claim 3, figure 4 shows the multiplexer 124.

Regarding claims 5-6, 8-9, 12-13, 26-27, figure 4 shows synchronous mirror delay circuit having measure controlled delay circuit (114).

8. Claims 1-3, 10 and 24 are rejected under 35 U.S.C. 102(e) as being anticipated by Zarate et al. (US 2005/0062510).

Figure 2 shows a method of generating a clock signal based on a periodic reference signal (220), said method comprising receiving a periodic reference signal, generating a clock signal synchronized to said reference signal in response to said receiving, feeding back said synchronized clock signal, delaying (210) said feed back synchronized clock signal to maintain synchronization with said reference signal, and generating a clock signal in response to said delayed fed back signal independent of said reference signal (when the multiplexer 202 coupled to signal 222) as called for in claims 1-2, 10 and 24.

Regarding claim 3, figure 4 shows the multiplexer 202.

***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. In this regard, applicant's cited prior art has been carefully considered.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan T. Lam whose telephone number is 571-272-1744. The examiner can normally be reached on Monday to Friday (7:30 am to 6:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, TIMOTHY P. CALLAHAN can be reached on 571-272-1740. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Tuan T. Lam  
Primary Examiner  
Art Unit 2816

11/05/2005

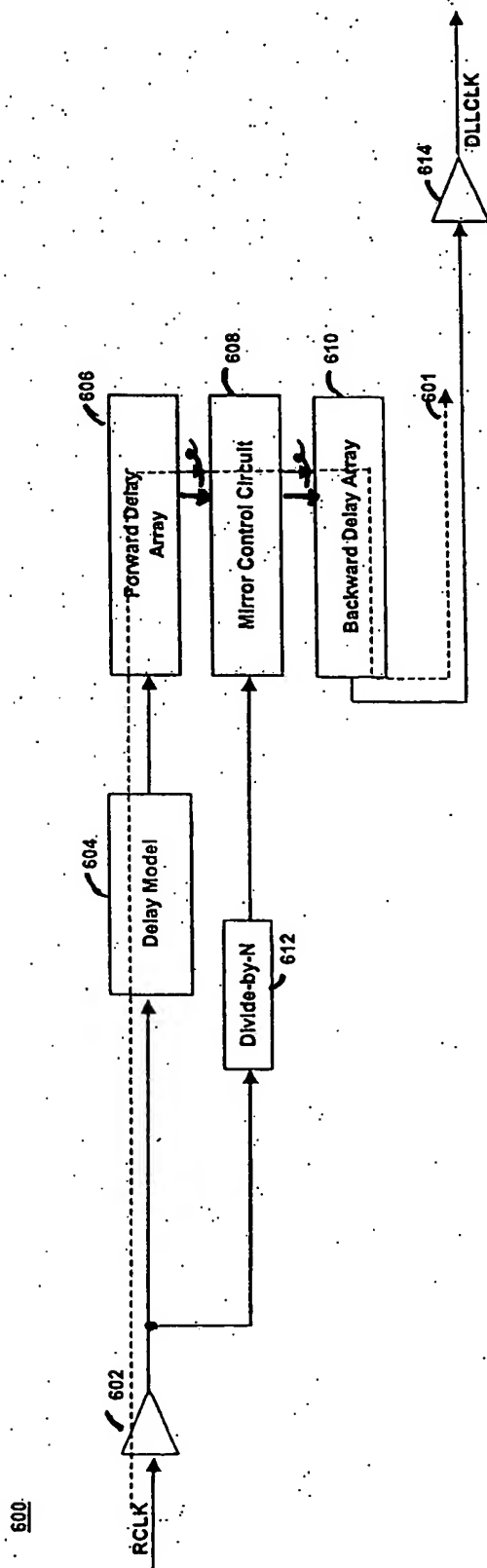


FIG. 6  
(PRIOR ART)

Approved  
Jan  
11/5/05



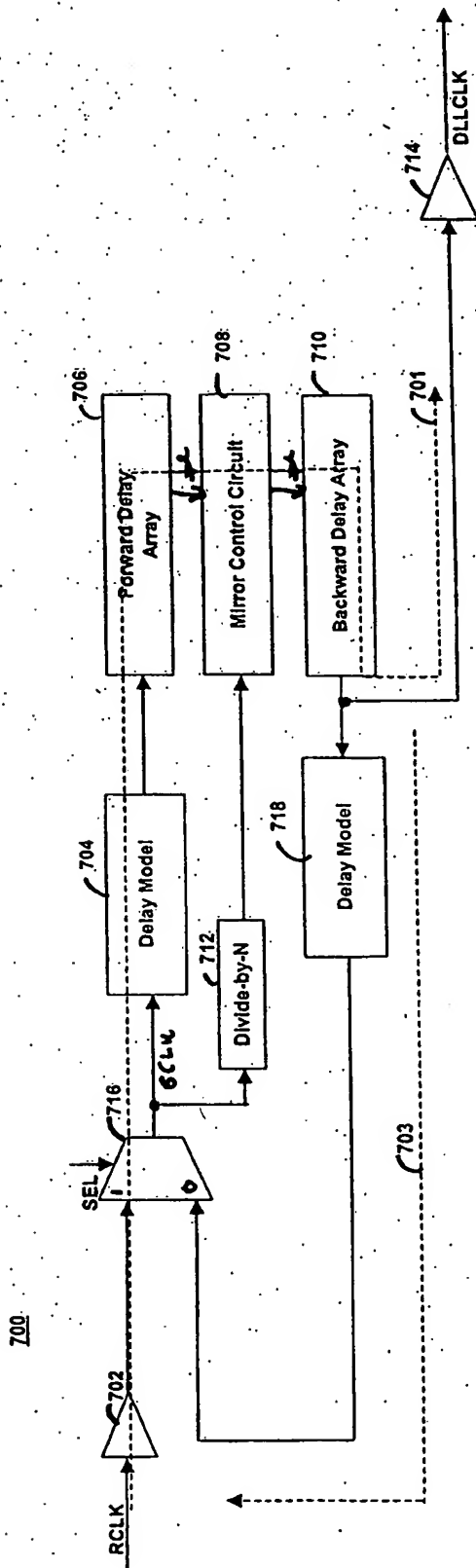


FIG. 7



**Fig. 9**